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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,356	01/07/2002	Pascal Agin	Q-67999	5474

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EXAMINER	
GELIN, JEAN ALLAND	
ART UNIT	**PAPER NUMBER**
2681	5

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,356	AGIN ET AL.	
	Examiner	Art Unit	
	Jean A Gelin	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-27,29,31,32,34,37,41 and 43-50* is/are rejected.

7)☒ Claim(s) *28, 30, 33, 35, 36, 38-40, and 42* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the Applicant's arguments filed on February 18, 2004 in which claims 17-50 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17-21, 23-27, 29, 31, 32, 34, 37, 41, 43-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Tiedemann Jr. et. (US 6,137,840).

Regarding to claims 17, 18, 26, 27, 29, 31, 32, 34, and 50, Tiedemann Jr. teaches a method for improving performances of a mobile radio communication system using a power control algorithm (col. 3, lines 13-17), the method comprising, upon the occurrence of a significant change in the required transmit power (col. 3, lines 20-26), performing the step of changing the transmit power according to a corresponding change in the required transmission quality target value (i.e., transmitting at higher power or lower power due to propagation path, col. 3, lines 27-38 and col. 4, lines 1-28), power control algorithm is an inherent feature of in CDMA system.

Regarding to claim 19, Tiedemann Jr. teaches the significant change in the required transmit power includes a change in transmission rate (col. 3, lines 35-37).

Regarding to claim 20, Tiedemann Jr. teaches the transmission quality target value has a predetermined value (col. 15, lines 11-37).

Regarding to claim 21, 43, Tiedemann Jr. teaches the predetermined value is regularly updated (col. 15, lines 46-57).

Regarding claim 23, Tiedemann Jr. teaches the communication system is CDMA type (col. 3, lines 27-30).

Regarding claim 24, Tiedemann Jr. teaches the power control is performed in the uplink transmission direction of the mobile radiocommunication system (col. 4, lines 7-11).

Regarding claim 25, Tiedemann Jr. teaches the power control is performed in the downlink transmission direction of the mobile radiocommunication system (col. 3, lines 43-65).

Regarding claim 37, Tiedemann Jr. teaches a mobile radiocommunication network entity comprising means for communicating the change in the required transmission quality target value to mobile stations (col. 3, lines 30-65).

Regarding claim 41, Tiedemann Jr. teaches means for communicating said corresponding change in the required transmission quality target value, to a mobile radio communication network entity (col. 5, line 45 to col. 6, line 24).

Regarding claims 44-46, Tiedemann Jr. teaches the radiocommunication system, including at least one mobile station (col. 5, lines 45-64).

Regarding claims 47-49, Tiedemann Jr. teaches the radiocommunication system, including at least one mobile radiocommunication network entity (col. 5, lines 18-44).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann Jr. et. (US 6,137,840) in view of Faber (US 6,405,052).

Regarding claim 22, Tiedemann Jr. teaches all the limitations above except the transmission quality is represented by a signal to interference.

However, the preceding limitation is known in the art of communications. Faber teaches determining a signal-to-interference ratio and a maximum power transmission level respectively as a predetermined first and second threshold and the condition to increment the transmission power is based on signal-to-interference ratio in closed loop power control (col. 5, lines 1-17 and col. 6, lines 3-15). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to implement the technique of Faber within the system of Tiedemann in order to avoid transmission power overshoot and increased interference at the beginning of the call acquisition between the mobile station and the base station due to the introduction of closed loop power control method (col. 6, lines 27-37).

Allowable Subject Matter

6. Claims 28, 30, 33, 35, 36, 38-40, and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the objected claims above are allowed for the same reasons recited in the previous Office Action above.

Response to Arguments

7. Applicant's arguments filed 2/18/04 have been fully considered but they are not persuasive.

The Applicant argues that Tiedemann, Jr. teaches upon the occurrence of a significant change in the required transmit power, performing a step of changing the transmit power according to a corresponding change in the required transmission quality target value. The Applicant further argues that the passage cited by the Examiner discloses nothing more than the well-known advantages of power control in CDMA system. This has nothing to do with the Applicant's invention.

However, the Examiner disagrees with the preceding argument. Tiedemann, Jr. teaches a change in transmission power by reducing the transmission power to the minimum of one user. This change allows another user to transmit at a higher power level corresponding to differences in propagation path (i.e., the propagation path depends on fading condition) (see col. 3. lines 23-38). The above teaching corresponds to change of transmission power corresponds to change in the transmission quality target value. Tiedemann, Jr. further teaches fading characteristics can be used to estimate the power control changes that need to be made corresponding to change of

power is based on the transmission quality, fading characteristics, (see col. 4, lines 14-34).

The Applicant merely argues that Faber is cited to show that transmission quality is represented by a signal to interference ratio. The Examiner agrees with the preceding assertion. The Applicant further argues that the combination of Tiedemann, Jr. and Faber would not produce the subject matter of claim 22. However, transmission quality is represented by a signal to interference ratio is well known in the art of communication as evidence by Faber (see above Office Action). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to implement the technique of Faber within the system of Tiedemann in order to avoid transmission power overshoot and increased interference at the beginning of the call acquisition between the mobile station and the base station due to the introduction of closed loop power control method (col. 6, lines 27-37). The representation of transmission quality as signal to interference ratio can be found in most of the prior arts cited; Faber is just one among them. These rejections are made final.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dicker et al., U.S. Patent No. 6,25,466 teaches if the station finds that the information transmitted with a low transmission power has a poor transmission quality, and then the transmission power of the mobile is switched back to high to the high transmission power.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika A Gary can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEAN GELIN
PATENT EXAMINER

JGelin
4/20/2004 Jean Alland Gelin